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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,369	08/25/2003	Masanobu Yamamoto	FY.50687US0A	2162
20995	7590	07/28/2006		
KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER YEAGLEY, DANIEL S	
			ART UNIT	PAPER NUMBER
			3611	

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/647,369

Applicant(s)

YAMAMOTO, MASANOBU

Examiner

Daniel Yeagley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 14-20 and 23-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 14-20 and 23-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The indicated allowability of claims 22 and 26 are withdrawn in view of the newly discovered reference(s) to Matsuda et al '089. Rejections based on the newly cited reference(s) follow.

Claim Objections

2. Claim 18 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Note that claim 4 has essentially the same limitations. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 24 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 24 and 25 depend from a canceled claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 4 – 7, 10, 15, 18, 19, 23 – 25 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsuda et al '089.

Matsuda shows a vehicle having a body, saddle-riding seat, steering assembly, drive system and an internal combustion engine E having a crankshaft 26 extending along a first axis mounted in a crankcase Ck (figure 3), a transmission coupled with the drive system (figure 1), and a coupling system for coupling the engine to the transmission that comprises a drive member 26A coupled with the crankshaft and is permanently meshed with a driven member 1A and configured to always rotate at the same speed, wherein the driven member is located along the first axis and coupled with the transmission and is rotatably supported by the crankcase (paragraph 46), such that the coupling system is located generally within the crankcase and the driven member is directly supported at a first and second end in the crankcase with bearings 2 and 5.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda et al '089.

Matsuda; as stated above, disclosed a coupling means having a driven member that includes a plurality of blades (spine teeth) that extend radially outward and configured to mate with a plurality of drive blades (spline teeth) that extend radially inward, Matsuda therefore discloses the claimed invention except for the reversal of the drive blades extending radially outward and the driven blades extending radially inward.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the coupling system of Matsuda and alternatively switch the order of the coupling members which utilizes a different form having essentially the same characteristics, wherein the blades of the driven and drive members of the coupling system are simply oriented in a reverse order, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art (In re Einstein, 8 USPQ 167) and is considered to be an obvious variation that would only be a matter of design choice and would work equally as well.

9. 1, 4 – 10, 15 – 19 and 22 – 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw '275 in view of Matsuda et al '089.

Shaw discloses a vehicle having a body, saddle-riding seat, steering assembly coupled with one or more skis and includes an engine and a transmission coupled with a drive system (figure 1), wherein the drive system comprising a drive track as claimed but failed to show the engine crankshaft extending along a first axis mounted in a crankcase with a coupling system having a drive member coupled with the crankshaft and permanently meshed with a driven member configured to always rotate at the same speed within the crankcase with bearings.

Matsuda; as stated above, disclosed an engine crankshaft extending along a first axis mounted in a crankcase with a coupling system having a drive member with a plurality of blades coupled with the crankshaft and permanently meshed with a driven member having a plurality of blades configured to always rotate at the same speed within the crankcase with bearings.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the drive system of Shaw vehicle with an alternative drive system utilizing an coupling system within the crankcase of the engine, in order to provide a more compact engine and drive system as suggested by Matsuda (paragraph 14).

10. Claims 2, 3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw '275 as modified by Matsuda '089 in further view of Barthruff '279.

Shaw as modified by Matsuda disclosed a vehicle with a coupling system having the drive and driven member being mounted within the crankcase of the engine as claimed, but failed to show a coupling means comprising a damper portion with at least one cushioning member located between the drive member and the driven member, wherein the driven member covers the drive member and the damper portion.

Barthruff discloses an coupling system for an internal combustion engine which incorporates a coupling means that is located generally within a casing (figure 1) which shows the prior art of a drive member 31 being coupled to a driven member 21 of the drive system by a dampening means 34, wherein the driven member covers the damper portion 34 and the drive member and are supported by the casing by bearings.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified the vehicle of Shaw as modified by the coupling drive assembly of Matsuda with an additional dampening means between the drive and driven members of the coupling system as suggested by Barthruff for enhancing the coupling means with a shock absorbing connection between the coupling members in order to dampen the force between the members during initial rotation of the coupling as taught by Barthruff.

Response to Arguments

11. Applicant's arguments filed 2/24/06 with respect to claims 1 – 10, 14 – 19 and 22 – 27 have been considered but are moot in view of the new ground(s) of rejection as stated above.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yamamoto '655, Nanami et al '624, Muramatsu et al '556, Nita et al '102, and Nakase et al '549 show a coupling means within a crankcase.

Nanami et al '930 shows a vehicle coupling system with drive and driven blade members.


13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Yeagley whose telephone number is (571)-272-6655. The examiner can normally be reached on Mon. - Fri; first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley D. Morris can be reached on (571) - 272 - 6651. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D.Y.


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